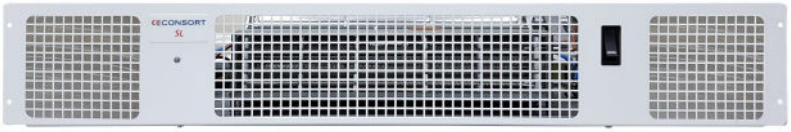
CONSORT

QUALITY SPACE HEATERS



Installation & Control Guide for SL Wireless Controlled Plinth Heater

PHSL3

All electrical appliances produced by the Company are guaranteed for one year against faulty materials or workmanship. This applies only if the appliance has been used for purposes in accordance with the instructions provided and has not been connected to an unsuitable electricity supply, or subject to misuse, neglect, damage or modified or repaired by any person not authorised by us. This guarantee is offered to you as an extra benefit and does not affect your legal rights.

The correct electricity supply voltage is shown on the rating label attached to the appliance.

Reasonable care has been taken to ensure that this guide is accurate at the time of printing. In the interest of progress the Company reserve the right to vary specifications from time to time without notice.

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1. General Information

1.1 Warnings

All installations must be in accordance with the regulations. These instructions must be handed to the user on completion of the installation. Installers and service engineers must be able to demonstrate competence and be suitably qualified in accordance with the regulations. To ensure continued and safe operation it is recommended that the appliance is serviced annually. The heater's outlet/inlet grilles must not be obstructed during use. Any modifications made to the unit, not approved by Consort, will void manufacturer's warranty and potentially create a hazard. The appliance is NOT intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience or knowledge unless they have been given instruction concerning use of the appliance by a person responsible for their safety.

1.2 Health and Safety

Please read these instructions thoroughly before installing the appliance. Sole liability rests with the installer to ensure that all site safety procedures are adhered to during installation. Sole liability rests with the installer to ensure that protective safety wear such as hand, eye, ear and head protection is used during installation of the product.



DO NOT OPERATE WITH WET HANDS



1.3 Location

The appliance is designed to fit behind the plinth board and below the base shelf of a kitchen-type cupboard i.e. within the free plinth space.

WARNING:

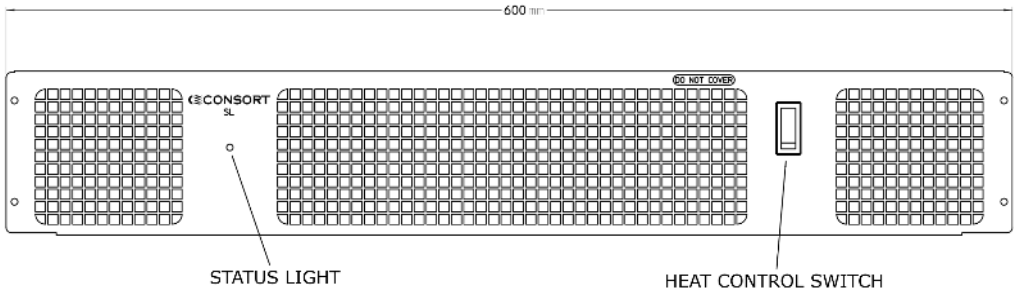


THIS HEATER SHOULD NOT BE INSTALLED WHERE THERE IS A CORROSIVE ATMOSPHERE OR EXCESSIVE DUST.

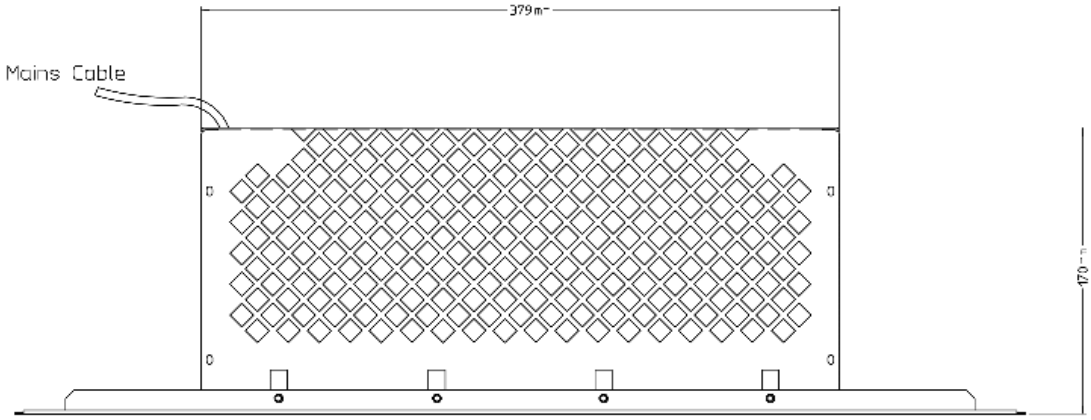


2. Dimensions

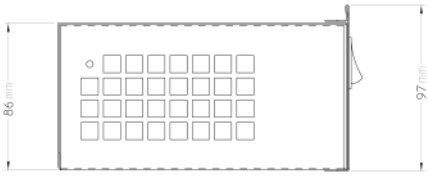
Front view



Top view



Left hand side view



3. Introduction

3.1 Introduction

This instruction manual describes the CONSORT plinth heater designed for mounting under a kitchen plinth board space as space heater.

This heater should not be installed where there is a corrosive atmosphere or excessive dust.

3.2 Electrical connections

These units are suitable for connection to a 230/240 Volt 50 Hz single phase supply. The unit is supplied with 2.4 metre of mains cable, each wire size is 1.5mm².

The appliance shall be connected to the supply via an appropriate switched fused double pole isolator having a contact separation of greater than 3mm. Test for correct operation and refit the cover.

There are no exceptions.

For safety reasons, a sound earth connection must always be made to the unit before it is put to use. The unit should be wired in accordance with IEE Regulations for the Electrical Equipment of Buildings.

3.3 Controllers

The PHSL3 can be controlled by any CONSORT wireless controller. Each controller can control any number of heaters providing they are within the RF range. For more details please follow the instructions supplied with the controller.

For a detailed guide on how to pair follow user instruction supplied with the controller. For the heater to pair, the power to the heater must be off at the start of the sequence.

3.4 Heat Control Switch

There is a heat control switch on the facia. When the control switch is 'OFF' the appliance blows only cold air. When this control switch is depressed to 'ON', the heating elements are engaged and the appliance blows hot air.



'OFF' FAN Only

Heating 'ON'

4. Installation

4.1 Installation Recommendations

It is recommended that careful thought is given to the siting of the appliance within the room. Try to avoid being directly in front of the heater for long periods. Consider where you may stand, at a work surface or the like. Position the heater to deliver the benefit of its warmth to the room in general but not so as to overheat yourself.

The heater must not be located immediately below a fixed socket outlet.

4.2 Installation Requirements

Figure 1 below shows the MINIMUM size cupboard unit into which the appliance may be fitted.

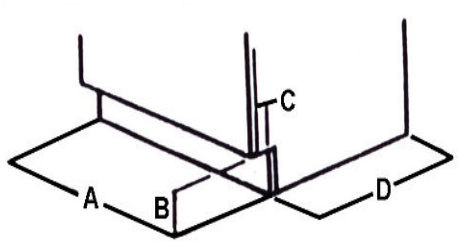


Figure 1. Minimum cupboard size.

UNIT REFERENCE	PHSL3
A - Width	600mm
B - Plinth Height	100mm
C - Base Shelf	75mm - max
D - Depth	500mm

The appliance may be installed into a cupboard with dimensions larger than those given above.

4.3 Facia Panel Airflow

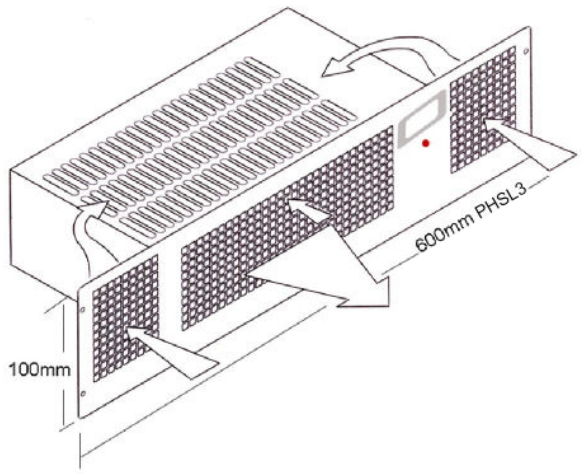


Figure 2. Inlet and outlet airflow of plinth heater.

4.4 Installation Procedure

1. Cut a hole in the plinth board, to the dimensions given in Figure 3.
2. The power supply cable must be routed from the connecting unit into the plinth space. The cable shall be sufficiently long as to pass through the plinth space and plinth board. This enables the appliance to be subsequently withdrawn from the plinth if maintenance is required. Ensure no sharp edges are present along the power cable route.
3. The appliance can now be slid through the plinth board, until the facia panel abuts the outside of the plinth board. Screw the facia panel to the plinth board with the screws provided.
4. Connect the unit to the mains power supply in accordance with the appropriate section of these instructions.

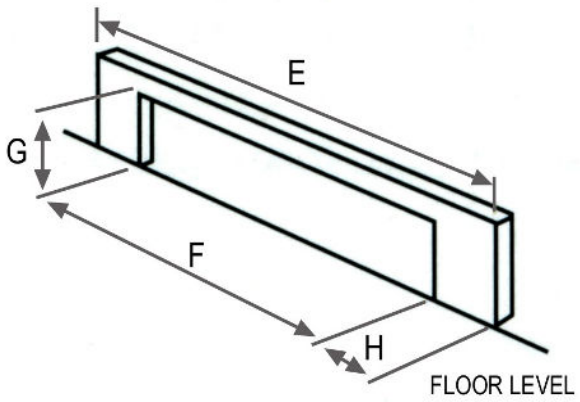


Figure 3. Mounting slot.

(mm)	E	F	G	H
PHSL3	600	540	95	30

4.5 Removal

To remove the appliance from the plinth space, should maintenance be required, disconnect mains power supply, unscrew fascia panel and slide out the appliance.

5. Heater operation and Status light

5.1 Wireless controls

The PHSL3 heater can only be controlled by CONSORT wireless controller.

The heaters will not work without a controller.
Controller is not supplied with the heaters

Each controller has a unique identification code. It can control an unlimited number of heaters in the same room and will not interfere with other controllers within the building. For more details, please follow the instructions supplied with the controller.

5.2 Status lights

The heater will indicate its operational status through a status light, as described in the options outlined below.

Light colour	Heater status
	Heater is in stand-by mode/ not receiving signal from controller. Heater is ready for pairing with controller.
	Fan only operation.
	Initial start up colour.
	Full power heat output.
	If the LED is flashing white, there is a fault. The unit should continue to function in restricted mode. However, in specific circumstances, the unit will stop running.

5.3 Controller Location

It is essential that the controller is positioned in the same room as the heater. It should be where its temperature will not be changed by local effects. Avoid:

- Draughty places near windows or doors
- Places near the heater itself or any other heat sources in the room
- Places where the sun will shine directly on it
- Places where it may get wet
- Places with little or no air circulation

5.4 Pairing heater to controller

To pair the SL heaters to a controller will require cycling the power to the heater then, depending on the controller in use, the pairing sequence buttons should be pressed within 20 seconds of cycling power.

Heaters have to be paired with the controller otherwise they will not work.

1. Ensure controller is powered
2. Cycle power to the heater (wait until status light disappears before reenergising the heater)
3. Within 20 seconds of powering the heater, depending on controller; press the pairing button/buttons
4. The heater status light should display two cyan light flashes followed by red
5. Heater is now ready to use.

5.5 Noise Levels

The noise levels of the plinth heater was measured to 40 dBA.

Sound pressure levels dBA are measured at a 3m distance with a single heater mounted at its designed location, operating in a room with average acoustic characteristics as defined in CIBSE Guide B5 (reverberation time 0.7s at 1kHz) and a room size equivalent to 8 air changes per hour (ac/h).

The dB meter must not be in the direct airflow of the heater. If the room is more 'live' (i.e. hard surfaces, no furnishings or absorbent materials), if the room is smaller than 8 ac/h equivalent or a combination of these factors.

Noise levels will also increase if more than one heater is installed in the same room (e.g. +3dBA for 2 equal point sources: direct field).

6. Fault detection / indication

6.1 Fault Indication

Heaters are equipped with electronic fault detection. In the event of a fault being detected, the heater will show the nature of the fault by a flashing status LED located at the front of the heater. The LED will flash one of the sequences as shown in the table below. The sequence is repeated every few seconds.

Number of flashes	Fault
1	Overheating detected Heater has detected overheating and is cooling down. After 10 minutes, it will return to normal operation.
2	Temperature measurement fault Cause: Faulty temperature sensor. Response: Will operate as normal. However, overheating protection will not work.
3	Low power detected Cause: low supply voltage, TOC tripped, faulty heating element, faulty PCB, power measurement fault. Response: Heater inoperative.
4	Problem with motor Cause: Faulty motor, RPM sensor fault, low supply voltage (following power-cut). Response: Heater inoperative.
5	High power detected Cause: Stuck relay, overvoltage. Response: Heater inoperative.

6.2 General

If the fan heater does not operate after switching on, then a suitably competent service engineer should be called to identify the nature of the fault.

All fan heaters are fitted with thermal cut-outs and motor thermal protection.

Other faults in relation to the element, motor and wiring should be identified using conventional fault finding techniques.

In the event that electrical components are replaced, please ensure that electrical safety checks in accordance with the regulations in force in the country of use are undertaken.

6.3 Thermal and Fault Protection

The units are protected from overheating in the event of fan failure or an obstruction of the free airflow by thermal cut-out protection.

If this happens, the thermal cut-outs effectively switch off the appliance by disconnecting power to the control circuit. The appliance will not operate until the thermal cut-outs have been disconnected from power; then allowed to cool for 10 minutes. This should be done by a competent electrician.

THE CAUSE OF CUT-OUTS OPERATING SHOULD BE INVESTIGATED BEFORE RESETTING

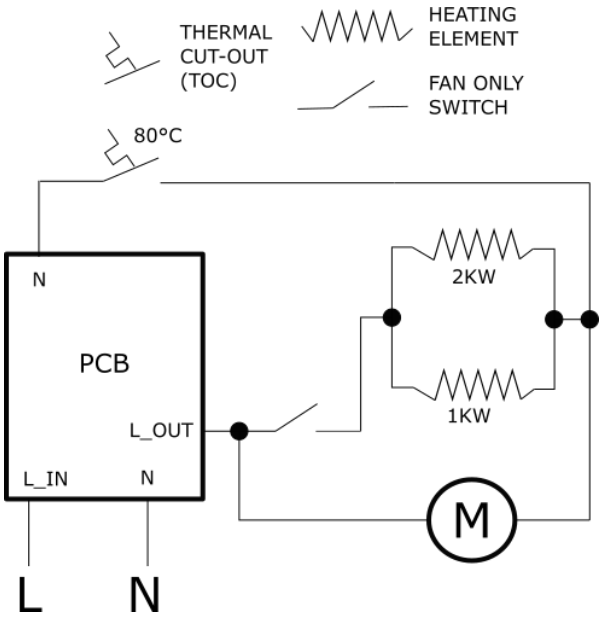
6.4 Maintenance

ALWAYS ENSURE THAT THE MAIN EXTERNAL ELECTRICITY SUPPLY IS SWITCHED OFF BEFORE COMMENCING ANY MAINTENANCE ON THIS HEATER.

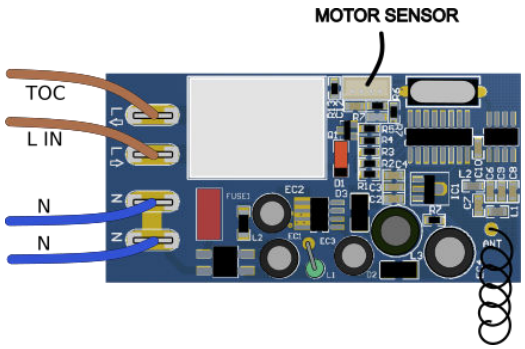
To obtain the best results from the heater, it is essential to avoid the accumulation of dust and dirt within the unit on the air inlet and discharge grilles. For this reason regular cleaning is necessary, paying particular attention to the removal of dirt build up on the rotor blades.

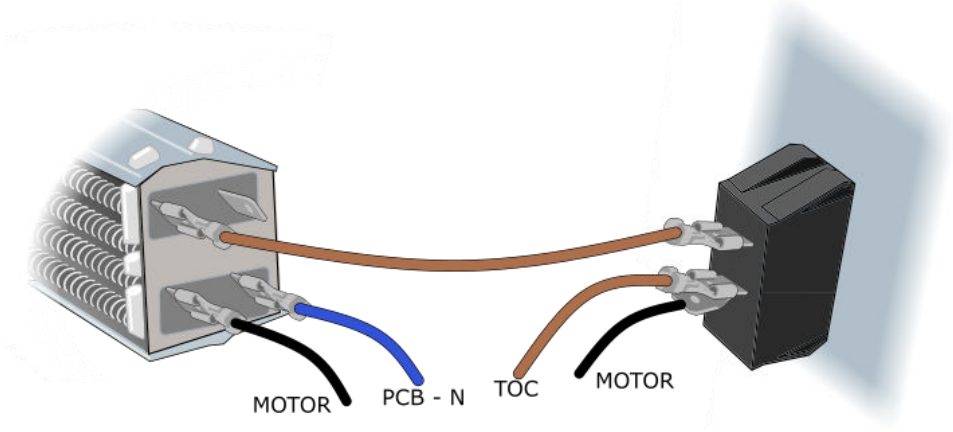
Cleaning of the fan is best carried out with a soft brush. The product should be serviced annually. Servicing shall be undertaken by a competent person.

7.1 Wiring Diagram



7.2 Heater Connections





Declaration Of Conformity

In accordance with UK Government Guidance.

WE HEREBY CERTIFY THAT THE APPLIANCES DETAILED HEREON HAVE BEEN INSPECTED AND TESTED, AND CONFORM TO THE REQUIREMENTS OF THE FOLLOWING UK STATUTORY INSTRUMENTS WHERE APPLICABLE:

Electrical Equipment (Safety) Regulations 2016 SI. 2016 1101
Electromagnetic Compatibility Regulations 2016 SI. 2016 No. 1091
Radio Equipment Regulations 2017 SI. 2017 No. 1206
The Restriction of use of Certain Hazardous Substances. SI. 2012 No. 3032
The Waste Electrical & Electronic Equipment Regulations 2013. SI. 2013 No. 3113
Security Requirements for 'Connectable Products' PTSI ACT 2022
The Product Security and Telecommunications Infrastructure (Security Requirements for Relevant Connectable Products) Regulations 2023

Transposed standards used:

- **BS EN 55014 (2016)**
- **BS EN 301489.1 & .3**
- **BS EN 300220 .1 & .2**
- **BS EN 60730.2.9**
- **BS EN 60335.1 (2012)**
- **BS EN 60335.2.30 (2009)**
- **ETSI BS EN 303645**
- **EN 50663 (2017)**
- **EN 60730-2-9 (2010)**
- **EN 60730-1 (2011)**
- **ETSI EN 300 220-1 V3.1.1 (2017-02)**
- **ETSI EN 300 220-2 V3.2.1 (2018-06)**
- **ETSI EN 301 489-1 V2.2.2 (2019)**
- **ETSI EN 301 489-3 V2.1.1 (2019)**

PART NUMBER AND DESCRIPTION OF APPLIANCE: **PHSL3W, PHSL3BL, PHSL3S**

NAME OF RESPONSIBLE PERSON: **DAVID O'SULLIVAN**
POSITION: **OPERATIONS MANAGER**
DATE: **20/08/25**

bsi ISO 9001 Quality Management Systems CERTIFIED
FM 12671

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